

CLAIMS

1- Method to write in a Flash type memory of an electronic module characterised in that it consists in associating at least two physical areas of said memory, called mirror areas, with the same logical area and during a write in said logical area, in programming the content of said logical area in one of said blank mirror areas, called the active area.

2- Method according to claim 1, characterised in that it consists in erasing the content of all mirror areas used in a single operation at a convenient time.

3- Method according to claim 2, characterised in that it consists in performing the erasure during a period of inactivity or when all the mirror physical areas are used.

4- Method according to one of claims 1 to 3, characterised in that it consists in copying the active physical area into a buffer area, in erasing all mirror physical areas and in copying the buffer into the first area available.

5- Method according to one of the claims 1 to 3, characterised in that it consists in performing the erasure and programming/read operations in parallel without blocking the system.

6- Method according to claim 5, characterised in that it consists in performing the erasure and programming/read operations in parallel in a bi-bank memory, each bank having mirror area(s), one bank being used for programming/reading whilst the other bank is erased, the method changing active bank when all mirror areas of the bank used for programming/read have been used.

7- Method according to one of claims 1 to 6, characterised in that it

consists in designating said active physical areas using a counter incremented on each change of active area.

8- Method according to one of claims 1 to 7, characterised in that it
5 consists in associating at least one bit with a logical area representing the use state of at least one mirror physical area of said logical area.

9- Method according to one of claims 1 to 8, characterised in that the
write is carried out in an active physical area if the content of the logical area
10 is identical to the content of the active physical area or when said write involves no erasure, and in a blank physical area otherwise.

10- Method according to claim 9, characterised in that it consists in
programming only part of the logical area in the blank physical area.
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11- Electronic module comprising information processing means, a
FLASH type non volatile memory characterised in that it comprises a mirror
memory formed from at least two physical areas and associated with the
same logical area, each new programming operation in said logical area
20 taking place in an area of the blank mirror area.

12- Card characterised in that it includes the electronic module
according to claim 11.

13- Computer program including program code instructions to execute
the method according to one of claims 1 to 10 when said program is run in a
data processing system.